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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,310	09/06/2000	Goro Ishida	04783/016001	9423

22511 7590 11/02/2005

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EXAMINER

POON, KING Y

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/656,310

Applicant(s)

ISHIDA, GORO

Examiner

King Y. Poon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 18-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 18-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/11/2005, 8/3/2005

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/5/2005 has been entered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "wherein the first print setting information is a relative designation and comprise: print specification information. and wherein said print specification information comprises at least one of a format of a page to be printed and a print quality; and setting means for converting the first print setting information received by said reception means into second print setting information based on the characteristic information stored in said first storage means, wherein the second print setting information is an absolute designation"; must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

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is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 35 is objected to because of the following informalities: "relative designation and absolute designation is not being defined in the specification".

In claim rejection (prior art), the relative designation and absolute designation are being interpreted as "designation"

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 35 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitations "wherein the first print setting information is a relative designation and comprise: print specification information, and wherein said print specification information comprises at least one of a format of a page to be printed and a print quality; and setting means for converting the first print setting information received by said reception means into second print setting information based on the characteristic information stored in said first storage means, wherein the second print setting information is an absolute designation" is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claim 39 is rejected under 35 U.S.C. 102(e) as being anticipated by Gase (US 6,184,996).

Regarding claim 39: Gase teaches computer readable medium (inherently, programs are stored in a computer readable memory) storing a program (column 3, lines 1-11) for making a printer (14, fig. 1) print the print object data in a host device (10, 12, fig. 1), comprising a processing function for outputting prescribed command data (command of for controlling printers, column 4, lines 20-35) to said printer and receiving prescribed command data (request for printer, column 3, lines 25-30) from said printer, interpreting said received prescribed command data (column 1, lines 10-45, signals must inherently interpreted by the host to understand what the signals are intended for); and performing prescribed processing (responds, column 3, lines 27-30) in accordance with results of the interpreting, wherein said processing function comprises: a setting request function for outputting command data (column 4, lines 20-37, column 4, lines

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44-47, printer job detail page, fig. 4) relating to the print setting; and data output means (the programs that reads a print job from an application, column 3, lines 1-10) for reading said print object data from a prescribed storage device (ready for submission, column 3, lines 1-10; i.e., a print job is there, but not being submitted; in order not to lose the print job, there must be a memory for storing the print job) based on command data relating to the data request sent from said printer in response to the command data (column 3, lines 10-25) output from the setting request function, and outputting command data (print data is a command for instructing the printer how to print) relating to data transmission (the print data is transmitted data, column 3, lines 25-30) based on said print object data.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-5, 11-14, 35, 37, 38, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pipeline Corporation, The hard copy observer, March 1997 in view of Gase (6,184,996) and Kaneko et al (US 6,040,670).

Regarding claims 1, 37, 40: Pipeline teaches a printing method with a printer (printer, fig. on page 45) connected to a host device (PDA, Cell pone, computer, etc., fig. on page 45), comprising: receiving first print setting information (setting the printer to

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periodically access a prescribed list Web site for receiving print objects, 1st column, lines 31-45, page 45, and providing URL's to the printer, column 2, page 45) from a host device (PDA, Cell pone, etc, fig. on page 45); requesting print object data (pages, 1st column, lines 31-45, page 45) to a Web site pursuant to said first print setting information; receiving print object data sent from the web site in reply to said request, and printing said print object data based on said first print setting information (1st column, lines 31-52, page 45).

Pipeline, does not teach the Web site is the host computer, and the print setting information comprises print specification information such as at least one of a format of a page to be printed.

Gase, who uses his invention to improve on Pipeline's printing system (column 1, lines 45-67, column 2, lines 1-25), teaches the computer, that a user used to program a printer, is the same computer that the printer used to access a print object (column 3, lines 15-25). Gase also teaches the print setting information (programming information) include print specification information (job entry parameter entered while entering a print job, column 4, lines 15-20, lines 40-48 includes e.g., print format of spread sheet or letter to be printed, fig. 3, or number of copies).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline to include: the host that setting the printer to periodically access a prescribed list Web site for receiving print objects is the same computer that provides the print object; and the print setting

information comprises print specification information such as at least one of a format of a page to be printed..

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline, after reading Gase, because the modification is taught by Gase, and is desirable (column 2, line 1, Gase). Print specification information may allow a user to tailor his print job according to the user's preference.

Gase as modified still does not teach print specification comprises a print quality.

Kaneko, in the same area of programming how a print job is to be printed, teaches print specification information includes a print quality (column 5, lines 1-16, column 6, lines 65-67, column 7, lines 1-10).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase/Pipeline to include: print specification comprises a print quality.

Selecting print quality is desirable because it would have allowed user to determines how good a print job is to be printed and would have allowed user to save toner if the quality of a print job is not that important such as a black and white information sheet such as the daily stock quotes or news item of Pipeline that is to be discarded after reading.

Regarding claim 2: Gase further teaches the desired modification to Pipeline's printing system comprising: receiving inquiry information regarding the print setting sent from said host device (column 3, lines 36-67); sending reply information to said host

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device based on the characteristic information of said printer in reply to said received inquiry information (fig. 2-4); and receiving first print setting information (the user would program the printer after receiving the reply, column 4, lines 20-45) sent from said host device in response to said reply information.

Regarding claim 3: Kaneko further teaches preparing second print setting information different dpi based on printer characteristic information (dpi that a printer is capable of producing is printer characteristic information); and printing the print object data sent from said host device based on said first print setting information and/or second print setting information.

Regarding claim 4: Pipeline teaches when said first print setting information designates printing based on a plurality of print object data (pages, column 2, page 45), respectively requesting said plurality of print object data.

Regarding claim 5: Gase further teaches the desired modification to Pipeline's printing system comprising: specifying print object data in a prescribed order (column 4, lines 25-32, Gase, also see column 2, page 45, Pipeline) based on said first print setting information; and requesting said specified print object data.

Regarding claim 11: Pipeline teaches requesting specific print object data (column 2, page 45) from said host device based on issued management information (periodically access the host is management information), wherein management information comprises print object data specifying information (inherent in Pipeline, if the print object cannot be identified, the print object cannot be retrieved).

Regarding claim 12: Gase further teaches the desired modification to Pipeline's printing system comprising: receiving an issuance request of management information (column 3, lines 50-67) sent from said host and issuing said management information in accordance with the print setting information (e.g., description of job, status of job, column 3, lines 50-67, fig. 3, the print job are set according to print setting information) in response to said received issuance request.

Regarding claim 13: Gase further teaches the desired modification to Pipeline's printing system comprising: issuing new management information when the processing related to the printing of print object data sent from said host device is completed (printed, column 3, line 61, fig. 3).

Regarding claim 14: Gase further teaches the desired modification to Pipeline's printing system comprising: releasing the management information of said completed print object data when the processing relating to the printing of said print object data is completed, and sending said released management information to said host device (printed, column 60, line 61, fig. 3).

Regarding claim 35: Pipeline teaches a printer (printer, fig. on page 45) connected to a host device, (PDA, computer etc, fig. on page 45) comprising: first storage means (the program of the printer, column 1, line 31-45, inherently, program code are stored in a memory/storage means) storing its characteristic information (program information); second (inherently properties, a memory unit can either store a 1 or 0; therefore a memory can not store two things) storage means for storing print setting information (the program from user, e.g., periodically access a web site, column

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1, lines 31-45) ; reception means (the device that receives user's program) for receiving first print setting information sent from said host device; and setting means (the software that interprets the program and controls the printer to send a request for stock quotes at eight o'clock, column 1, lines 31-45) for converting the first print setting information received by said reception means into second print setting information (keeping track of the time 8 o'clock) based on the characteristic information stored in said first storage means; wherein said printer prints the print object data sent from a web site based on the second print setting information stored in said second storage means.

Pipeline, does not teach the Web site is the host computer, and the print setting information comprises print specification information.

Gase, who uses his invention to improve on Pipeline's printing system (column 1, lines 45-67, column 2, lines 1-25), teaches the computer, that a user used to program a printer, is the same computer that the printer used to access a print object (column 3, lines 15-25). Gase also teaches the print setting information (programming information) include print specification information (job entry parameter entered while entering a print job, column 4, lines 15-20, lines 40-48 includes e.g., print format, fig. 3, or number of copies)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline to include: the host that setting the printer to periodically access a prescribed list Web site for receiving print objects is the same computer that provides the print object; and the print setting information comprises print specification information.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline, after reading Gase, because the modification is taught by Gase, and is desirable (column 2, line 1, Gase). Print specification information may allow a user to tailor his print job according to the user's preference.

Gase as modified still does not teach print specification comprises a print quality.

Kaneko, in the same area of programming how a print job is to be printed, teaches print specification information includes a print quality (column 5, lines 1-16, column 6, lines 65-67, column 7, lines 1-10).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase/Pipeline to include: print specification comprises a print quality.

Selecting print quality is desirable because it would have allowed user to determines how good a print job is to be printed and would have allowed user to save toner if the quality of a print job is not that important such as a black and white information sheet such as the daily stock quotes or news item of Pipeline that is to be discarded after reading.

Regarding claim 38: Gase further teaches the desired modification to Pipeline's printing system comprising: obtaining characteristic information (fig. 2-fig. 4) of a printer necessary for printing with a specific printer from said specific printer, preparing said first print setting information (column 4, lines 20-35) by the host based on said obtained

characteristic information; and sending said prepared print setting information to said specific printer.

10. Claims 18-22, 28-34, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pipeline Corporation, The hard copy observer, March 1997 in view of Gase (6,184,996), Nagata (US 5,138,696) and Kaneko et al (US 6,040,670).

Regarding claim 18: Pipeline teaches a printer (fig. on page 45) connected a host device (PDA, computer etc, fig. on page 45), comprising: a processing means (the software of the printer, PIPS, fig. on page 45) for interpreting (inherently, there must be a software/means to interpreting signals received to understand what the signals are intended for) command data (programming instruction from user, column 1, lines 31-45) sent from said host device and performing prescribed processing (requesting daily stocks at 8 o'clock, column 1, lines 31-45, page 45) in accordance with the results of the interpreting; printing means (all printers must have a printing means that print images on a recording medium) for executing printing to a print recording medium, wherein said processing means includes: request means (the requesting software that request print pages, column 1, lines 31-45, page 45) for requesting from a web site for the print object data designated by print setting information based on command data relating to the print setting; and a generation means (the program that reproduce 1, or 0's from the electric signals received by the printer) for generating print object data obtainable based on command data relating to data transmission based on print setting information (the printing data must be generated before 8 o'clock).

Pipeline, does not teach the Web site is the host computer, and the print setting information comprises print specification information.

Gase, who uses his invention to improve on Pipeline's printing system (column 1, lines 45-67, column 2, lines 1-25), teaches the computer, that a user used to program a printer, is the same computer that the printer used to access a print object (column 3, lines 15-25). Gase also teaches the print setting information (programming information) include print specification information (job entry parameter entered while entering a print job, column 4, lines 15-20, lines 40-48 includes e.g., print format of spread sheet or letter to be printed, fig. 3, or number of copies).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline to include: the host that setting the printer to periodically access a prescribed list Web site for receiving print objects is the same computer that provides the print object; and the print setting information comprises print specification information.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline, after reading Gase, because the modification is taught by Gase, and is desirable (column 2, line 1, Gase). Print specification information may allow a user to tailor his print job according to the user's preference.

Pipeline and Gase does not teach generating bit map data and storing these bit map data in a prescribed memory.

Nagata, in the same area of printing, teaches generating bit map data and storing these bit map data in a prescribed memory (column 3, lines 12-35).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline to include generating bit map data and storing these bit map data in a prescribed memory.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline because of the following reasons: (a) bit map data would have instruct the printer what to print at a particular point; and (b) storing would have prevent the print data being lost before they are printed.

Gase as modified still does not teach print specification comprises a print quality.

Kaneko, in the same area of programming how a print job is to be printed, teaches print specification information includes a print quality (column 5, lines 1-16, column 6, lines 65-67, column 7, lines 1-10).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase/Pipeline to include: print specification comprises a print quality.

Selecting print quality is desirable because it would have allowed user to determines how good a print job is to be printed and would have allowed user to save toner if the quality of a print job is not that important such as a black and white information sheet such as the daily stock quotes or news item of Pipeline that is to be discarded after reading.

Regarding claim 19: Gase further teaches the desired modification to Pipeline's printing system comprising: wherein the processing means sends to the host device receiving inquiry information based on its characteristic information (fig. 2-4) in response to command data relating to a print setting inquiry (column 3, lines 36-67); and receives command data (program data) relating to the print setting sent from the host device in response to said reply information (the user would program the printer after receiving the reply, column 4, lines 20-45).

Regarding claim 20: Pipeline further teaches wherein the processing means prepares second print setting information (keeping track of the time, inherent properties when a printer access the host periodically) based on the characteristic information of the first print setting information sent from said host device; and printing the print object (generating bit map data) data sent from said host device based on said first print setting information and/or second print setting information.

Regarding claim 21: Pipeline teaches when said first print setting information designates printing based on a plurality of print object data (pages, column 2, page 45), said processing means respectively requesting said plurality of print object data.

Regarding claim 22: Gase further teaches the desired modification to Pipeline's printing system comprising: specifying print object data in a prescribed order (column 4, lines 25-32, Gase, also see column 2, page 45, Pipeline) based on said first print setting information; and requesting said specified print object data.

Regarding claim 28: Pipeline teaches wherein the processing means requests specific print object data (column 2, page 45) from said host device based on issued management information (periodically access the host is management information).

Regarding claim 29: Gase further teaches the desired modification to Pipeline's printing system comprising: wherein the processing means issues said management information in accordance with the print setting information (e.g., description of job, status of job, column 3, lines 50-67, fig. 3, the print job are set according to print setting information) in response to a command (column 3, lines 37-45) request relating to the issuance request of management information.

Regarding claim 30: Gase further teaches the desired modification to Pipeline's printing system comprising: wherein the processing means issues new management information when the processing related to the printing of print object data is completed (printed, column 3, line 61, fig. 3).

Regarding claim 31: Gase further teaches the desired modification to Pipeline's printing system comprising: wherein the processing means releases the management information of said completed print object data when the processing relating to the printing of said print object data is completed, and sends said released management information to said host device (printed, column 60, line 61, fig. 3).

Regarding claim 32: Gase further teaches the desired modification to Pipeline's printing system comprising: wherein the processing means requests said print object data to said host device upon receiving information (column 3, lines 15-25, column 4, lines 25-37, a user set the printer/sending information to the printer to request a

particular job first, inherently, host transmit code to printer and all code transmitted to the printer also contain information of indicating the end of the code) relating to the termination of the print setting from said host device.

Regarding claim 33: Gase further teaches the desired modification to Pipeline's printing system comprising: wherein the processing means suspends printing (fig. 3, fig. 4, select a printing job to be cancel) upon receiving print suspension information from said host device while printing said print object data.

Regarding claim 34: Gase further teaches the desired modification to Pipeline's printing system comprising: wherein the processing means sends information (status of a print job, column 3, lines 59-62) relating to the termination of print processing to said host device upon suspending said printing.

Regarding claim 36: Pipeline teaches a computer readable medium (inherently, all program are stored in a computer readable medium) storing a program (column 1, lines 1-7, page 45) for controlling a printer (fig. on page 45) connected a host device (PDA, computer etc, fig. on page 45), comprising: a processing function for interpreting command data (programming instruction from user, column 1, lines 31-45) sent from said host device and performing prescribed processing (requesting daily stocks at 8 o'clock, column 1, lines 31-45, page 45) accordance with the results of the interpreting (user sending a program/signal and the printer must (inherent) interpret the signal to understand what the user wants), wherein said processing function comprises a request function (column 1, lines 31-45, page 45) for requesting to a web site for the print object data designated by print setting information based on command data relating to the print

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setting; and a generation function (the program that reproduce 1, or 0's from the electric signals received by the printer) for generating print object data obtainable based on command data relating to data transmission and print data based on print setting information (the printing data must be generated before 8 o'clock).

Pipeline, does not teach the Web site is the host computer, and the print setting information comprises print specification information.

Gase, who uses his invention to improve on Pipeline's printing system (column 1, lines 45-67, column 2, lines 1-25), teaches the computer, that a user used to program a printer, is the same computer that the printer used to access a print object (column 3, lines 15-25). Gase also teaches the print setting information (programming information) include print specification information (job entry parameter entered while entering a print job, column 4, lines 15-20, lines 40-48 includes e.g., print format, fig. 3, or number of copies)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline to include: the host that setting the printer to periodically access a prescribed list Web site for receiving print objects is the same computer that provides the print object; and the print setting information comprises print specification information.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline, after reading Gase, because the modification is taught by Gase, and is desirable (column 2, line 1, Gase). Print

specification information may allow a user to tailor his print job according to the user's preference.

Pipeline and Gase does not teach generating bit map data and storing these bit map data in a prescribed memory.

Nagata, in the same area of printing, teaches generating bit map data and storing these bit map data in a prescribed memory (column 3, lines 12-35).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline to include generating bit map data and storing these bit map data in a prescribed memory.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline because of the following reasons: (a) bit map data would have instruct the printer what to print at a particular point; and (b) storing would have prevent the print data being lost before they are printed.

Gase as modified still does not teach print specification comprises a print quality.

Kaneko, in the same area of programming how a print job is to be printed, teaches print specification information includes a print quality (column 5, lines 1-16, column 6, lines 65-67, column 7, lines 1-10).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase/Pipeline to include: print specification comprises a print quality.

Selecting print quality is desirable because it would have allowed user to determines how good a print job is to be printed and would have allowed user to save

toner if the quality of a print job is not that important such as a black and white information sheet such as the daily stock quotes or news item of Pipeline that is to be discarded after reading.

11. Claims 6, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pipeline in view of Gase and Kaneko as applied to claims 1 above, and further in view of Kujirai (US 6,307,637).

Regarding claim 6: Pipeline does not teach dividing a prescribed print area of a print recording medium into prescribed partial areas when said received first print setting information is designating automatic arrangement of print object data; and requesting print object data from said host device to be arranged within said divided prescribed partial areas based on said first print setting information by said printer.

Kujirai teaches dividing a prescribed print area of a print recording medium (number of sheet of paper, fig. 7) into prescribed partial areas (4 partial area, fig. 7) when said received first print setting information is designating automatic arrangement of print object data (fig. 7).

Therefore, it would have been obvious to a person with ordinary skill at the time the invention was made to have modified Pipeline to include: dividing a prescribed print area of a print recording medium into prescribed partial areas when said received first print setting information is designating automatic arrangement of print object data.

It would have been obvious to a person with ordinary skill at the time the invention was made to have modified Pipeline by the teaching of Kujirai because it

would have allowed Pipeline's technology to be used in Bookbinding/printing to increase sale, and would have allowed Kujirai's printing method to be benefit in using Pipeline's Internet printing technology.

Note: Note: Pipeline teaches requesting print object data from said host device to be printed by said printer which includes requesting print object data from said host device to be arranged within said divided prescribed partial areas based on said first print setting information by said printer after modification.

Regarding claim 7: Kujirai dividing said prescribed print area into said prescribed partial areas made from said prescribed number of divisions in accordance with the value relating to a prescribed number of divisions designated by said first print setting information (column 9, lines 48-55).

12. Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pipeline in view of Gase, Kaneko, and Kujirai as applied to claims 6 above, and further in view of Nakajima (US 5,218,460).

Regarding claim 8: Pipeline as modified by Kujirai does not teach determining the arrangement area of the print object data to be arranged within said prescribed partial areas in accordance with the margin value designated by said first print setting information.

Nakajima, in the same area of controlling printing, teaches determining the arrangement area of the print object data to be arranged within said prescribed partial

areas in accordance with the margin value designated by said first print setting information (column 6, lines 30-35).

Therefore, it would have been obvious to a person with ordinary skill at the time the invention was made to have modified Pipeline to include: determining the arrangement area of the print object data to be arranged within said prescribed partial areas in accordance with the margin value designated by said first print setting information.

It would have been obvious to a person with ordinary skill at the time the invention was made to have modified Pipeline by the teaching of Nakajima because it would have allowed Pipeline's technology to be used in Bookbinding/printing to increase sale, and would have allowed Kujirai's printing method to be benefit in using Pipeline's Internet printing technology.

13. Claims 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pipeline in view of Gase, Kaneko, and Kujirai as applied to claims 6 above, and further in view of Benson (US 6,411,396)

Regarding claim 9: Pipeline does not teach generating a prescribed band area worth of bit map data based on said print object data sent from said host device.

Benson teaches generating a prescribed band area worth of bit map data based on said print object data sent from said host device (column 8, lines 36-40).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase as modified to include:

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generating a prescribed band area worth of bit map data based on said print object data sent from said host device.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase as modified by the teaching of Benson because: dividing data in bands would reduce the system memory which would result in a cheaper product and increased sale.

Regarding claim 10: Pipeline does not teach respectively requesting a plurality of print object data to be arranged in said partial areas belonging to a prescribed band area in said prescribed print area.

Benson teaches generating a prescribed band area worth of bit map data based on said print object data sent from said host device (column 8, lines 36-40).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase as modified to include: requesting a plurality of print object data to be arranged in said partial areas belonging to a prescribed band area in said prescribed print area.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase as modified by the teaching of Benson because: dividing data in bands would reduce the system memory which would result in a cheaper product and increased sale.

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14. Claims 23, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pipeline in view of Gase, Nagata, and Kaneko as applied to claims 18 above, and further in view of Kujirai (US 6,307,637).

Regarding claim 23: Pipeline does not teach dividing a prescribed print area of a print recording medium into prescribed partial areas when said received first print setting information is designating automatic arrangement of print object data; and requesting print object data from said host device to be arranged within said divided prescribed partial areas based on said first print setting information by said printer.

Kujirai teaches dividing a prescribed print area of a print recording medium (number of sheet of paper, fig. 7) into prescribed partial areas (4 partial area, fig. 7) when said received first print setting information is designating automatic arrangement of print object data (fig. 7).

Therefore, it would have been obvious to a person with ordinary skill at the time the invention was made to have modified Pipeline to include: dividing a prescribed print area of a print recording medium into prescribed partial areas when said received first print setting information is designating automatic arrangement of print object data.

It would have been obvious to a person with ordinary skill at the time the invention was made to have modified Pipeline by the teaching of Kujirai because it would have allowed Pipeline's technology to be used in Bookbinding/printing to increase sale, and would have allowed Kujirai's printing method to be benefit in using Pipeline's Internet printing technology.

Note: Note: Pipeline teaches requesting print object data from said host device to be printed by said printer which includes requesting print object data from said host device to be arranged within said divided prescribed partial areas based on said first print setting information by said printer after modification.

Regarding claim 24: Kujirai dividing said prescribed print area into said prescribed partial areas made from said prescribed number of divisions in accordance with the value relating to a prescribed number of divisions designated by said first print setting information (column 9, lines 48-55).

15. Claims 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pipeline in view of Gase, Nagata, Kaneko, and Kujirai as applied to claims 23 above, and further in view of Nakajima (US 5,218,460).

Regarding claim 25: Pipeline as modified by Kujirai does not teach determining the arrangement area of the print object data to be arranged within said prescribed partial areas in accordance with the margin value designated by said first print setting information.

Nakajima, in the same area of controlling printing, teaches determining the arrangement area of the print object data to be arranged within said prescribed partial areas in accordance with the margin value designated by said first print setting information (column 6, lines 30-35).

Therefore, it would have been obvious to a person with ordinary skill at the time the invention was made to have modified Pipeline to include: determining the

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arrangement area of the print object data to be arranged within said prescribed partial areas in accordance with the margin value designated by said first print setting information.

It would have been obvious to a person with ordinary skill at the time the invention was made to have modified Pipeline by the teaching of Nakajima because it would have allowed Pipeline's technology to be used in Bookbinding/printing to increase sale, and would have allowed Kujirai's printing method to be benefit in using Pipeline's Internet printing technology.

16. Claims 26, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pipeline in view of Gase, Kaneko, Nagata, and Kujirai as applied to claims 23 above, and further in view of Benson (US 6,411,396)

Regarding claim 26: Pipeline does not teach generating a prescribed band area worth of bit map data based on said print object data sent from said host device.

Benson teaches generating a prescribed band area worth of bit map data based on said print object data sent from said host device (column 8, lines 36-40).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase as modified to include: generating a prescribed band area worth of bit map data based on said print object data sent from said host device.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase as modified by the teaching of Benson

because: dividing data in bands would reduce the system memory which would result in a cheaper product and increased sale.

Regarding claim 27: Pipeline does not teach respectively requesting a plurality of print object data to be arranged in said partial areas belonging to a prescribed band area in said prescribed print area.

Benson teaches generating a prescribed band area worth of bit map data based on said print object data sent from said host device (column 8, lines 36-40).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase as modified to include: requesting a plurality of print object data to be arranged in said partial areas belonging to a prescribed band area in said prescribed print area.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase as modified by the teaching of Benson because: dividing data in bands would reduce the system memory which would result in a cheaper product and increased sale.

Response to Arguments

17. Applicant's arguments filed 8/3/2005 have been fully considered but they are not persuasive.

With respect to applicant's argument that Gase does not teach outputting command data based on a setting request function, has been considered.

In reply: Column 4, Gase teaches by clicking one of the entries on the job detailed page, an entry can be highlighted and altered. Clicking is being performed by a user at the host side. An altered entry is located at the printer side. In order for this to happen, a command signal must be sent from the host to the printer such that a print setting such as the number of copies can be altered.

With respect to applicant's argument that Gase does not teach sending or receiving print specification information, has been considered.

In reply: number of copies of Gase of column 4, is print specification information of specifying how a print job is to be printed.

With respect to applicant's argument that Nagata does not teach receiving print object data from a host designated by print setting information based on command data relating to the print setting and the print setting information comprises print specification information and the print specification comprises at least one of a format of a page to be printed and a print quality, has been considered.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Pipeline teaches a printer (fig. on page 45) connected a host device (PDA, computer etc, fig. on page 45), comprising: a processing means (the software of the printer, PIPS, fig. on page 45) for interpreting (inherently, there must be a software/means to interpreting signals received to understand what the signals are intended for) command data (programming instruction from user, column 1, lines 31-45) sent from said host device and performing prescribed processing (requesting daily stocks at 8 o'clock, column 1, lines 31-45, page 45) in accordance with the results of the interpreting; printing means (all printers must have a printing means that print images on a recording medium) for executing printing to a print recording medium, wherein said processing means includes: request means (the requesting software that request print pages, column 1, lines 31-45, page 45) for requesting from a web site for the print object data designated by print setting information based on command data relating to the print setting; and a generation means (the program that reproduce 1, or 0's from the electric signals received by the printer) for generating print object data obtainable based on command data relating to data transmission based on print setting information (the printing data must be generated before 8 o'clock).

Pipeline, does not teach the Web site is the host computer, and the print setting information comprises print specification information.

Gase, who uses his invention to improve on Pipeline's printing system (column 1, lines 45-67, column 2, lines 1-25), teaches the computer, that a user used to program a printer, is the same computer that the printer used to access a print object (column 3, lines 15-25). Gase also teaches the print setting information (programming information)

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include print specification information (job entry parameter entered while entering a print job, column 4, lines 15-20, lines 40-48 includes e.g., print format of spread sheet or letter to be printed, fig. 3, or number of copies).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline to include: the host that setting the printer to periodically access a prescribed list Web site for receiving print objects is the same computer that provides the print object; and the print setting information comprises print specification information.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline, after reading Gase, because the modification is taught by Gase, and is desirable (column 2, line 1, Gase). Print specification information may allow a user to tailor his print job according to the user's preference.

Pipeline and Gase does not teach generating bit map data and storing these bit map data in a prescribed memory.

Nagata, in the same area of printing, teaches generating bit map data and storing these bit map data in a prescribed memory (column 3, lines 12-35).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline to include generating bit map data and storing these bit map data in a prescribed memory.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Pipeline because of the following reasons: (a)

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bit map data would have instruct the printer what to print at a particular point; and (b) storing would have prevent the print data being lost before they are printed.

Gase as modified still does not teach print specification comprises a print quality.

Kaneko, in the same area of programming how a print job is to be printed, teaches print specification information includes a print quality (column 5, lines 1-16, column 6, lines 65-67, column 7, lines 1-10).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase/Pipeline to include: print specification comprises a print quality.

Selecting print quality is desirable because it would have allowed user to determines how good a print job is to be printed and would have allowed user to save toner if the quality of a print job is not that important such as a black and white information sheet such as the daily stock quotes or news item of Pipeline that is to be discarded after reading.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 26, 2005

A handwritten signature in black ink, appearing to read 'King Y. Poon', with a stylized flourish at the end.

KING Y. POON
PRIMARY EXAMINER